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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/703,399	08/26/1996	TSUNEAKI KURUMIDA	862.811-CI	7850

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EXAMINER

HONG, STEPHEN S

ART UNIT	PAPER NUMBER
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2178

DATE MAILED: 12/18/2003

53

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/703,399

Applicant(s)

KURUMIDA, TSUNEAKI

Examiner

Stephen S. Hong

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 124-126 and 128-136 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 124-126 and 128-136 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: amendment filed on August 13, 2003 to the application filed 8/26/96 which is a FWC of the application Ser. No. 08/155,656 filed 11/22/93; prior art filed 3/1/99.
2. In the amendment claim 127 has been canceled. Accordingly, claims 124-126 and 128-136 are pending in this case. Claims 124 and 134-136 are independent claims.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119, which papers have been placed of record in the file.

Drawings

4. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. Claims 124-126 and 128-136 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Seto, U.S. Pat. No. 5,398,311, 3/95 (filed 2/88) in view of Kokunishi

et al., U.S. Pat. No. 4,897,638, 1/90 and Sakurai, U.S. Pat. No. 5,562,350, 10/96 (filed 4/89).

As per claims 124, 125 and 134-136, Seto discloses the following claimed elements in an outline forming apparatus:

- a storage medium for storing a plurality of coordinate data, including a coordinate datum indicating a first outline point of a pattern corresponding to a first weight value and a coordinate datum indicating a second outline point of a pattern corresponding to a second weight value, said second weight value indicating a weight value at which vector data change (col.5, line 12, "A character pattern ..is expressed by a dot train P0, P1, P2" and col.3, line 2, "... reference character data is stored as coordinate point information on contours and which is provided arithmetic operating means ...[and] is enlarged or reduced in accordance with designated output size."; also see FIG.2B and col.5, lines 36-51);

- inputter for inputting weight information indicating a desired weight of an outline of a pattern to be generated (col.5, line 55, "the output size designated by the keyboard ...and mouse...");

- a calculation unit for generating an outline of the pattern having the weight indicated by the weight information input by said input means; said outline being generated from outline points which are obtained by moving the basic outline points based on said weight information, the coordinate information and the movement information (col.3, lines 6-20, "...with designated output size, the coordinate point information indicative of the main outer shape is first subject to arithmetic operation for enlargement of reduction by using the coordinate value information as the absolute values....").

However, Seto does not disclose using an acquiring unit, arranged for acquiring coordinate and vector data corresponding to the weight value input by said inputter, from said storage medium, by referring to the identification information, where the weight value indicates the thickness of the pattern in the same font size.

As per the missing limitations, Kokunishi discloses an outline forming system using moving the control points (see FIG.5), using the movement information of the points with respect to the different weight (col.3, lines 33-40) and that the weight value indicates the thickness of the pattern in the same font size (Figures 7A and 7B). In the prior art, Kokunishi discloses the claimed element of: the movement information including position information indicating relative positions of outline points of the pattern having a weight different from the predetermined weight relative to the positions indicated by the coordinate information (col.9, lines 33-62, "Even a stroke of a same class can have various edge-side shapes ... for example, the starting edge-side may be added with serif or not and the ending edge-side is a straight line or a curve."). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have incorporated Kokunishi's invention into Seto, since Kokunishi explicitly provided the motivation in the disclosure by teaching that "the present invention ..provide[s] ...character patterns of high quality, while providing ...the feasibility of design change"). Given that, Kokunishi and Seto is different from the claimed invention in that Kokunishi does not show the path information of the "first vector data" or the "second vector data" indicating a moving path of the outline points, to be selected in conjunction with change of the weight.. Although Kokunishi suggests varying the moving-path of the points so that different design styles can be assigned to different weights (col.9, lines 33-62, "*Even a stroke of a same class* can have various edge-side shapes.." suggests that different stroke class usually have different variance in the shape.) , Kokunishi does

not explicitly show the use of the "first" and "second" vector data in the prior art. However, varying the style of a character with respect to the scaling weight was well known technique in the art, as Sakurai disclosed a character forming invention "in which each vector character font is provided with an effective size range of character generation and with information on vector character font of a style to be used outside said effective size range, thereby enabling character output with an optimum vector character font according to the character size (col.1, lines 45-50)." Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have incorporated, in the invention of Seto and Kokunishi, the means to vary the relative positions of the points with each other to vary the style based on weight by assigning a plurality of vector data to each point, since Sakurai provided the explicit motivation by teaching that it would have solved the problems in the prior art (such as in Seto) that when "characters of all sizes are formed from a vector character pattern of a same style, small characters are easily filled in and become illegible (col.1, line 24)" and "[i]mage quality is deteriorated in a large character size, if the vector character pattern is simplified in complex portion (col.1, line 33)."

As per dependent claim 126, 129 and 130, Seto further teaches a printer for generating the pattern of characters (col.4, line 28).

As per dependent claims 128, 131 and 132, Seto does not explicitly teach that the vector information indicates a straight line and a curve line with degree information, wherein the degree information is second degree or higher. However, Kokunishi teaches the feature. For the vectors describing the curve segment of the font character, Kokunishi teaches that a cubic polynomial vectors are used (col.12, line 6, "...in FIG.5, a bezier curve is used for interconnecting points... 617, 618 and 619, and a straight line is used for interconnecting points 619 and 611."). It would have been obvious to a person

of ordinary skill in the art at the time the invention was made to have incorporated Kokunishi's feature into that of Seto, since it was well known that fonts, in general, include curved segments.

As per dependent claim 133, Seto discloses:

- wherein said degree information includes an information indicating that coordinate data is constant regardless of change of weight value (col.6, lines 21-51; also col.6, line 54, "All of the values of FX ..., the offset values of the contour points indicative of the additional outer shape can be uniform or can be limited to a few kinds of values ..."; also FIG.2B and col.5, lines 24-51 that shows the means for determining the zero movements, which is thus "constant").

Response to Amendment

7. Applicant's arguments filed August 13, 2003 have been fully considered but they are not persuasive.


Applicant argues that Kokunishi of FIGS.7A and 7B "show that each character size has a plurality of thickness classes, each of which has its own stroke thickness. However, the thickness class is assigned to each of the strokes constituting a character pattern. Applicant strongly asserts that nothing has been found, or pointed out, in Kokunishi that would teach or suggest changing weight in a single given character size."

Examiner disagrees with the Applicant's analysis of the prior art. According to FIG.7B of Kokunishi, a single given character size must fall in one of the "Character Pattern Scaling Factor." Since for each Character Pattern Scaling Factor, a plurality of "Stroke Thickness" can be achieved using the weight value, Kokunishi clearly discloses the claimed feature.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen S. Hong whose telephone number is (703) 308-5465. The examiner can normally be reached on Monday to Friday, 9:00am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


Stephen Hong
Primary Examiner
Art Unit 2178
December 14, 2003